PATENT
206-001

CONTRACTORS PROTECTION DEVICE AND METHODS OF MANUFACTURE

BACKGROUND OF THE INVENTION

[001] The present invention relates to apparatus and methods for increased efficiency construction, and more specifically to apparatus and methods that reduce man power and material costs associated with protecting finished work during ongoing construction.

[002] Construction is a very large, and fast growing market. Total construction has grown from 555 billion dollars in 1995 to over 784 billion dollars in 1999. The 784 billion dollars includes 552 billion dollars in private construction and 172 billion dollars in public construction. The private construction includes 348 billion dollars in residential dollars with 204 billion dollars in non-residential, office, hotels, motels, commercial, religious, educational, hospital, institutional, telecommunications, railroads, electric light & power, gas and petroleum pipelines. The 172 billion dollars in public construction includes 78 billion dollars in buildings with the remained composed of highways, streets, military facilities, sewer systems, and water supply facilities.

[003] The process of building out an area or constructing a building occurs in many steps. During this process, a number of different types of workers are required and it may be necessary to complete the construction in steps. Another problem is that frequently, contractors damage door frames, stairs, and finished work in the process of completing other tasks and moving in and out heavy equipment.

[004] Prior art attempts to solve this problem are labor intensive, not easily adaptable and do not bend. Presently, contractors solve this problem by covering all surfaces with paper, taping securely to the furniture, millwork, or finished work and finally taping panels (e.g. masonite) to the paper. This

process is very labor intensive, requiring the contractor to custom cut all paper, tape and paneling. Also, the paneling does not bend or fold to cover corners or intricate works.

[005] There have been attempts to solve the specific problem of covering door frames. By way of example, U.S. Patent Number 6,357,187 issued to Haldemann discloses a Door Frame Protector. The device include opposing contact edge which extend around the edge of a doorway to contact and grip opposing walls adjacent the doorway. While the '187 patent represents a significant advancement in the art it is too specific and not easily adaptable. For instance, different sizes have to be purchased for different size door frames.

[006] Accordingly, what is needed is an easily adaptable, flexible, yet sturdy device and methods of manufacturing for protecting furniture, doorways, stairs, painting, walls, carpet or millwork.

SUMMARY OF THE INVENTION

[007] The present invention provides an easy to use, flexible, yet sturdy, rollable, device for protecting construction and methods of manufacture.

[008] According to one embodiment of the present invention, a flexible, yet sturdy device for protecting construction is disclosed comprising: a paper backing having a front side, back side, a connecting end and a finishing end; a plurality of strips each having a first end and a second end, wherein the plurality of strips are securely affixed to the front side in a parallel fashion with the first end abutting the finishing end.

[009] According to another embodiment, a flexible, yet sturdy device for protecting construction is disclosed, the device comprising: a paper backing having a front side, back side, a connecting end and a finishing end; an adhesive applied to the connecting end; a plurality of strips each having a first end and a second end, wherein the plurality of strips are securely affixed to the front side in a parallel fashion with the first end abutting the finishing end and

the second end of the plurality of strips being between one and six inches from the connecting end.

[010] According to another embodiment, a flexible, yet sturdy device for protecting construction is disclosed, the device comprising: a paper backing having a front side, back side, a connecting end and a finishing end; an adhesive applied to said connecting end; a plurality of strips being between one foot and eight feet long, between 1/16 inch and 1 inch thick, each having a first end and a second end and being securely affixed to the front side in a parallel fashion with the first end abutting the finishing end and the second end of the plurality of strips being between one and six inches from the connecting end and the width of the paper backing being slightly larger than the length of the strips.

[011] According to another embodiment, a flexible, yet sturdy device for protecting construction is disclosed, the device comprising: a paper backing having a front side, back side, a first connecting end and second connecting end; an adhesive applied to the first connecting end; an adhesive applied to the second connecting end; a plurality of strips being between one foot and eight feet long, 1/16 inch and 3 inches wide and between 1/16 inch and 1 inch thick, each having a first end and a second end, wherein the plurality of strips are securely affixed to the front side in a parallel fashion and wherein the first end of the plurality of strips is between one and six inches from the first connecting end and the second end of said plurality of strips is between one and six inches from the second connecting end and the width of the paper backing is larger than the length of the strips.

[012] A method of manufacturing a device for protecting furniture, millwork, finished work and flooring, the method comprising the steps of: providing a paper backing wherein said paper backing has a front side, back side, connecting end and finishing end; affixing a plurality of strips to said paper

backing, said plurality of strips being parallel to each other and perpendicular to said connecting end and said finishing end and at least one inch from said connecting end; and applying an adhesive material to said connecting end of said paper backing.

[013] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[014] Figure 1 is an elevational view of a device according to the present invention;

[015] Figure 2 is an elevational view of a device according to the present invention;

[016] Figure 3 is an elevational view of a device according to the present invention; and

[017] Figure 4 depicts a flowchart of a method of manufacture according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[018] The following detailed description is of the best currently contemplated modes of carrying out the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

[019] As shown in Figure 1, a flexible, yet sturdy device 10 is disclosed for protecting items during construction. It should be understood that the device may be used for movers, contractors or anyone who wants to protect items, furniture and the like. As shown, there is a paper backing 12 having a front side 14, back side 16, a connecting end 18 and a finishing end 20; a plurality of strips 22 each having a first end 24 and a second end 26, wherein said plurality of strips are securely affixed to the front side 14 in a parallel fashion with the first end 24 abuts the finishing end 20. According to a preferred embodiment, there is an adhesive 28 applied to the front side 13 along the connecting end 18. The adhesive 28 may be any adhesive known within the art including a peel away tape. The strips 22 may be between one foot and eight feet long 32, 1/16 inch and 3 inches wide 34 and between 1/16 inch and 1 inch thick 36. It is preferred that the strips 22 are between one and six inches from the connecting end 18 (the distance depicted by numeral 38). The paper may be between one foot and eight feet wide 40 and is slightly larger than the length 32 of the strips 22. The strips 22 are preferably made of masonite and may be made of a material selected from the group consisting of plastic, masonite, plywood, polymers, corex and sound board.

[020] The present invention allows for the paper to be rolled out to protect furniture, stairs, etc. and be easily adapted to any size. Also a number of the devices, or layers, may be combined, as shown in Figure 2. For example, a layer may be rolled out, the adhesive strip 40 attached to the connecting end 18 removed and another layer rolled out, so that the finishing end 20 of one roll is adhered to the connecting end 18 of another layer to provide protection that is twice as wide.

[021] There may also be adhesive strips 30 attached to back side 16 of the paper backing 12. The device may be supplied in rolls (as shown) with a portion of the front side 14, connecting end 18 and finishing end 20 being visible. The strips 22 are typically between 1/16" and 1" thick, the strips are

evenly spaced at a distance between 1/8 and four inches from another. Previously, a contractor would cover all surfaces and tape panels over the items. This is extremely time consuming, requiring power tools to cut the panels to fit around furniture, columns, electrical outlets, etc. The device as disclosed herein, though, allows for items to be protected by rolling the paper with the strips attached and affixing with easy peel off adhesive. A number of the rolls may be combined due to the finishing end 20 and connecting end 20.

[022] Figure 3 depicts another embodiment that has two connecting ends. This is useful where there may be a number of the rolls connected to one another. For example, large areas that need to be covered may require the device 50 as shown, having a paper backing 52 having a front side 54, back side, a first connecting end 56 and a second connecting end 58; an adhesive 60 applied to the first connecting end 56; an adhesive 62 applied to the second connecting end 58; a plurality of strips 64 being between one foot and eight feet long (length 66), 1/16 inch and 3 inches wide (width 68) and between 1/16 inch and 1 inch thick 70, each having a first end 72 and a second end 74, wherein the plurality of strips are securely affixed to the front side 54 in a parallel fashion and wherein the first end 72 of the plurality of strips is between one and six inches 76 from the first connecting end 56 and the second end 74 of the plurality of strips is between one and six inches from the second connecting end 58 and the width of the paper backing is larger than the length of the strips.

[023] Also envisioned is a method of manufacturing a device for protecting furniture, millwork, finished work, the method comprising the steps of: step 100 providing a paper backing wherein said paper backing has a front side, back side, connecting end and finishing end; step 102 affixing a plurality of strips to said paper backing, said plurality of strips being parallel to each other and perpendicular to said connecting end and said finishing end and at least one inch from said connecting end ; step 103 is optional and may be evenly spacing said strips at a distance between one and four inches from another;

step 104 applying an adhesive material to said connecting end of said paper backing; step 106 rolling said device so as to provide said plurality of strips upright with front side, said connecting end and said finishing end being visible; step 108 attaching adhesive strips to said back side of said paper backing.

[024] The device may be manufactured so that the paper has a width between one foot and eight feet. The paper may be selected from the group consisting of craft paper, non-reinforced paper, reinforced paper, red rosin paper and reinforced paper. The strips are preferably made of a material selected from the group consisting of plastic, masonite, plywood, polymers, corex and sound board and may be between 1/16" and 1" thick.

[025] It should be understood that the foregoing relates to preferred embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.